

### Preliminary results from the ERS 1 altimeter in the Alboran Sea

Sea surface height measurements as derived from the ERS1 altimeter from Jan.-Dec. 1992 were used to study the gyre-scale circulation in the Alboran Sea, of the Mediterranean. This basin, which is at the entrance to the Mediterranean from the Straits of Gibraltar, is known for two anticyclonic gyres known as the western and eastern gyres.

Data from the ERS 1 altimeter was extracted in the area between  $35^{\circ}\text{N}$  to  $38^{\circ}\text{N}$  and  $-6^{\circ}$  to  $0^{\circ}$ . Atmospheric corrections including the wet and dry troposphere were applied. After removal of the RAPP mean sea surface a quadratic in the along-track direction between  $20^{\circ}\text{N}$  and  $60^{\circ}\text{N}$  was also applied to remove the orbit error. The along-track data was interpolated to a regular grid in space-time using a successive correction scheme. To include an entire repeat a 35-day e-folding time scale was applied in the spatial domain. These maps were created at a regularly spaced 10 day interval for 1992. The maps of sea level residual will be compared with SAR imagery and in-situ data in the given area.

Initial results indicate the possibility that both gyres may not be part of the permanent circulation of the Alboran Sea. However, detailed comparisons with SAR and in-situ data will have to be done before such results can be confirmed and quantified with certainty.